

CLAIMS

What is claimed is:

1. A method comprising:

Moving an AFM probe over a fiducial; and

Detecting the topography of the fiducial to facilitate registration.
2. The method of Claim 1 wherein the fiducial is on the surface of a substrate.
3. The method of Claim 2 wherein the fiducial comprises concentric circular ridges.
4. The method of Claim 3 wherein the fiducial further comprises a center hole.
5. The method of Claim 4 wherein the detecting comprises height deflection detection.
6. The method of Claim 5 wherein the detecting comprises torsional strain detection.
7. The method of Claim 4 wherein the substrate comprises sites for depositing or synthesizing biological molecules.
8. A substrate comprising:

A nanometer scale fiducial on the surface of the substrate, wherein the fiducial is suitable for detection with an AFM probe for registration.

9. The substrate of Claim 8 wherein the fiducial comprises concentric circular fiducial ridges.
10. The substrate of Claim 9 wherein the fiducial further comprises a center hole.
11. The substrate of Claim 10 wherein the substrate comprises sites for depositing or synthesizing biological molecules.
12. The substrate of Claim 10 wherein the substrate comprises a plurality of different oligonucleotide probes.
13. The substrate of Claim 12 wherein the oligonucleotides are immobilized on the substrate.
14. The substrate of Claim 13 wherein each of the oligonucleotide probes is immobilized in a nanometer scale feature.